

**IN THE CLAIMS:**

1. (Previously Presented) A method of automatically detecting fiber cabling errors in an optical network comprising:
  - detecting current fiber connectivity between optical nodes in the network;
  - storing information regarding the current fiber link connectivity;
  - detecting any cabling changes; and
  - determining the impact of the cabling changes on service through the network including impacts on cross-connects and lightpaths; and
  - displaying the impact of the cable changes on the service including the impacts on cross-connects and lightpaths.
2. (Original) The method as defined in claim 1 wherein the step of determining impact on services supports the step of directing operator resolution of errors caused by the cabling changes.
3. (Original) The method as defined in claim 2 implemented by an element management system (EMS) within a node.
4. (Original) The method as defined in claim 2 implemented within a network management system (NMS).
5. (Original) The method as defined in claim 2 implemented with an operations support system (OSS).
6. (Original) The method as defined in claim 2 implemented in a combination of EMS, NMS and OSS.
7. (Original) The method as defined in claim 1 wherein current fiber connectivity and any cabling changes are displayed on a graphical user interface (GUI).

8. (Original) The method as defined in claim 7 wherein the GUI displays a correlation between optical nodes in the network and fiber connectivity.

9. (Original) The method as defined in claim 7 wherein the GUI displays cross-connection impacted by a cabling change.

10. (Original) The method as defined in claim 7 wherein the GUI displays lightpaths impacted by a cabling change.

11. (Original) The method as defined in claim 7 wherein any cabling change must be approved by an operator before initiation of the change.

12-19. (Canceled)

20. (Previously presented) The method of claim 1 wherein impact determining step includes determining if lightpaths have been automatically rerouted off affected optical links.

21-23. (Canceled)